Funding Your Research

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Funding your research is not only knowing where to go
for money, but as important, preparing a proposal the
funding agency wants to fund!

Presentation Overview

Part 1: Grant Proposal

1. When to seek grant money
2. Importance of concurrent preparation and submission of IRB/IACUC and grant proposals
3. Grant writing assistance
4. What contributes to a good proposal?

Part 2: Funding Opportunities

5. Finding funding opportunities for your research

Part 1.

Why seek funding?

What contributes to a successful grant proposal?

Why seek funding?

- Additional Personnel Resources:
  - Research Staff
    - Assistants
    - Coordinators
    - Nurses
  - Specifically Trained Staff *(Dep't unable to absorb add'l workload)*
    - Radiologist or techs
    - Lab Techs
    - Physical Therapist Techs
  - Consultants
- Equipment, supplies
  - Camera
  - Audiovisual recording device
  - Microscope
- Subject compensation
- Models
  - Animals
  - Cadaveric
- Travel
  - Required to conduct the research

How to begin:

- Good idea!!
- Determine feasibility:
  - Pass your idea by colleagues
  - Conduct literature search
- Complete required CITI training (PI & AIs)
  - Specific sections for animal research protection
- Make initial contacts early:
  - IRB Administrator (research application – IRB or IACUC)
  - Grants Writer
  - Biostatistician (to establish sample size, statistical procedure, & for data analysis)
  - Attending Veterinarian
  - Funding agency's Program Manager
  - Preproposal (recommended *vs.* required)

Your Good Idea…

… answers 4 questions:

- Does it address an important problem?
- Will scientific knowledge be advanced?
- Does it build or expand current knowledge?
- Is it feasible to implement and investigate?

Contact the Grant Writer

- Initiate contact early if funding is required
  - Christine Ehlers @ 757 953-5939 or …@med.navy.mil
- Application deadlines are not negotiable
- Need time to find best funding source and prepare your application
- Concurrently work on both applications:
  - IRB/IACUC application, and
  - Grant Application
- Converse regularly

Grant Writing: Low Probability of Success

- Proposal success rates average ~20%
- More than half are rejected on first reading because:
  - Proposal did not match program announcement or align with funding agencies priorities
  - Applicant did not follow directions
- Not always given a chance to re-submit

Top Reasons for Failure

Problem or concern	Solution
1. Lack of new or original ideas	• Conduct a through and up-to-date literature search • Know if your research is new, novel or replicating another study
2. Diffuse, superficial or unfocused research plan	• Submit a well-organized, through and focused proposal
3. Lack of experience in the essential methodology to conduct the study	• Ensure your experience will support what you want to study and the methodology you decide to use • Consider consultants
4. Questionable reasoning in the experimental approach	• Make certain your proposal will make sense to the reviewer (suggest colleague review beforehand)
5. Unreasonably large amount of work	• Make sure you will be able to complete your study within the given timeframe
6. Lack of experimental detail	• Ensure enough information for the reviewer to understand exactly how you will

Road to success!

- Study purpose and goals match the agency's priorities
- Keep the proposal organized and follow guideline format
- Prove the importance of your project
- Assume an uninformed but intelligent reader
- Objectives are specific and measureable
- Organized and an attainable plan
  - Milestones & Timetable
- Follow application instructions exactly

Proposal answers 4 essential questions:

- What do you intend to do?
- Why is the work important?
- What has already been done?
- How are you going to do the work?

If done properly, the proposal will be succinct, logical, clear, persuasive,

and, what is really important, easy to read and understand.

Ogden & Goldberg (1991). The Abstract and Specific Aims. In Research Proposals (pp. 65 – 67).

Preparing for the funding agency review:

- Ask a colleague to review your application
  - A colleague who does not know what you intend to do

- After review, your colleague should be able to tell you:
  - What you intend to do (objective)
  - Why it's important to do it (knowledge gap)
  - Exactly how you are going to do it (methodology)

Leave enough time to make revisions – deadlines approach quickly and are not negotiable

Funding Agency Review – tips!

Good proposals will keep your reviewers interested!

- Reviewers often work late reviewing applications
- Help them stay interested
- Make your application easy to read and understand
- Convince the reviewers to advocate for your idea

What Determines Which Grants Are Funded?

1. Scientific Merit – achieving high scores by reviewers

2. Program Considerations - your research must be aligned with the funding agencies' priorities

3. Availability of Funds

Common Reviewer Criticism

- “Research is unfocused”
- “Study is overambitious”
- “Not clear investigator has needed experience”

Summary:

- Assume you are not writing for an expert
- Emphasize general medical importance; then specific importance to your topic
- Discuss controversies in the area, present the literature
- Thorough, up-to-date literature search and review
- Make your project interesting – make the reviewer want to read more!
- Convince the reviewer you can do what you propose

Part 2.

Funding opportunities

Funding Opportunities - Overview

- Command – NMCP
- Congressional Funding
  - BUMED
    - SG / CIP
    - BUMED OCO
      - WII // TBI // PH
  - Defense Health Program
    - DMRDP
    - CDMRP
- Congressional Funding
  - U.S. Army
    - USAMRMC
      - CCCRP
      - MOMRP
- NIH
- Professional Organizations
- Private Foundations

NMCP Commander's Fund

Award $100K (total disbursed)

- Seed money
- RFA*: August via NMCP "All Hands" announcement
- Areas of Interest: Unlimited
- Proposal submission deadline: Sept/Oct
- Application form: IRB / IACUC application
- Applications reviewed / judged by: Departmental Research Coordinators (competitive award)

*RFA – Request for Applications

Congressional Funding
DoD Allocated Funds
to OASD // HA

U. S. Navy

BUMED Funding

Defense Health Program (DHP)

DMRDP
(Defense Medical Research & Development Program)

CDMRP
(Congressionally Directed Medical

U.S. Army

USAMRMC
(U.S. Army Medical Research and Materiel Command)

- MOMRP
  (Military Operational Medical Research Program)
- CCCRP
  (Combat Casualty Care Research Program)

BUMED: OCO WII / TBI / PH

BUMED funding – Award: $250-300K

- RFA: On-going
- Application Form: Includes project summary, objectives, milestones, outcome metrics, budget with justification
- Areas of Interest: WII // TBI // PH
- Applications reviewed at BUMED level
- Must have an approved IRB / IACUC proposal at time of submission
- Funding released: based on availability (and proposal

BUMED: DSG / CIP

U.S. Navy SG – Award: $1.8M

- RFA: June
- Areas of Interest: Released when RFA is released (Wounded Warrior and research gaps)
- Proposal submission deadline: August
- Application form: Attached to RFA
- Board convenes: September
  - NMW reviews NME submissions (& vice versa); BUMED reviews all
- Funds released: October (or later, when available)
- Approved IRB proposal not required at time of submission

Defense Health Program

- Defense Medical Research and Development Program (DMRDP)

and

- Congressionally Directed Medical Research Programs
  (CDMRP)

DMRDP Program

- https://dmrdp.amedd.army.mil/
- Password access (easy to set up)
- Currently no open Program Announcements
- DMRDP proposals must be applicable to all branches of military
- Full announcement very detailed
- Separate set of instructions
- Contact numbers and websites available to provide assistance
- Submission directly to DMRDP
- Pre-proposals required and then, if accepted, invited to submit full proposal

CDMRP – Focus Areas

- ALS
- Autism
- Bone Marrow Failure
- Breast Cancer
- Genetic Studies of Food Allergies
- Gulf War Illness
- Lung Cancer
- Multiple Sclerosis
- Neurofibromatosis
- Ovarian Cancer
- Peer Review Cancer
- Peer Review Medical
- Peer Review Orthopaedic
- Prostate Cancer
- Psychological Health / TBI

CDMRP – Current FOAs

As of November 5, 2011, all pre-application deadlines have been met – there are no current FOAs

For future funding CDMRP opportunities use below link:

http://cdmrp.army.mil/funding/prgdefault.shtml

USAMRMC* BAA -12-1 (Broad Agency Announcement)

- Intent: Solicit research ideas aimed at providing solutions to medical problems of importance to the American Warfighter - at home and abroad.

- The BAA is continuously open. Pre-proposals evaluated at any time throughout the year.

USAMRMC BAA -12-1 (Broad Agency Announcement)

- Access via http://www.usamraa.army.mil/pages/baa_forms/index.cfm
- Available Extramural Medical Researchers
  - DoD Intramural Investigators may collaborate with PI from civilian universities, *or*
- Intramural Investigators may apply for BAA 12-1 funding
  - Proposals will be re-routed directly to the appropriate RAD (Research Area Director) from one of the Research Areas of Interest (next slide)
- Preproposal required: Feedback within 60-90 days, application due within 90 days of receipt of invite to submit
- Submission deadline: 30 Sept 2012

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USAMRMC BAA -12-1 Research Areas of Interest

1. Military Infectious Disease Research Program
2. Combat Casualty Care Research Program
3. Military Operational Medicine Research Program
4. Clinical and Rehabilitative Medicine Research Pgrm
5. Medical Biological Defense Research Program
6. Medical Chemical Defense Research Program
7. Telemedicine and Advanced Technology Program

USAMRMC BAA -12-1 #2 (of 8) – Combat Casualty Care Research Program

Principle causes of death occurs within 1st hr of wounding are hemorrhage &TBI. Consequently, CCCRP strongly supports

1. R & D of technologies to stop blood loss, resuscitate, limit consequences of severe blood loss.
2. R & D to dx and limit impairments that follow TBI and spinal cord injury.
3. Reducing secondary damage such as ischemia/ reperfusion injury
4. Additional aspects of casualty care: drugs, devices, or novel wound techniques to decontaminate, debride, protect and stabilize soft tissue wounds

Note: Specifics of each focus area are provided in USAMRMC BAA 12-1 Program Announcement @:
https://www.usamraa.army.mil/pages/baa_forms/index.cfm

USAMRMC BAA -12-1 #3 (of 8) – Military Operational Medicine Research Program

- Focus areas:
  1. Injury Prevention and Reduction
  2. Psychological Health and Resilience
  3. Physiological Health
  4. Environmental Health and Protection

Note: Specifics of each focus area are provided in USAMRMC BAA 12-1 Program Announcement @: ***https://www.usamraa.army.mil/pages/baa_forms/index.cfm***

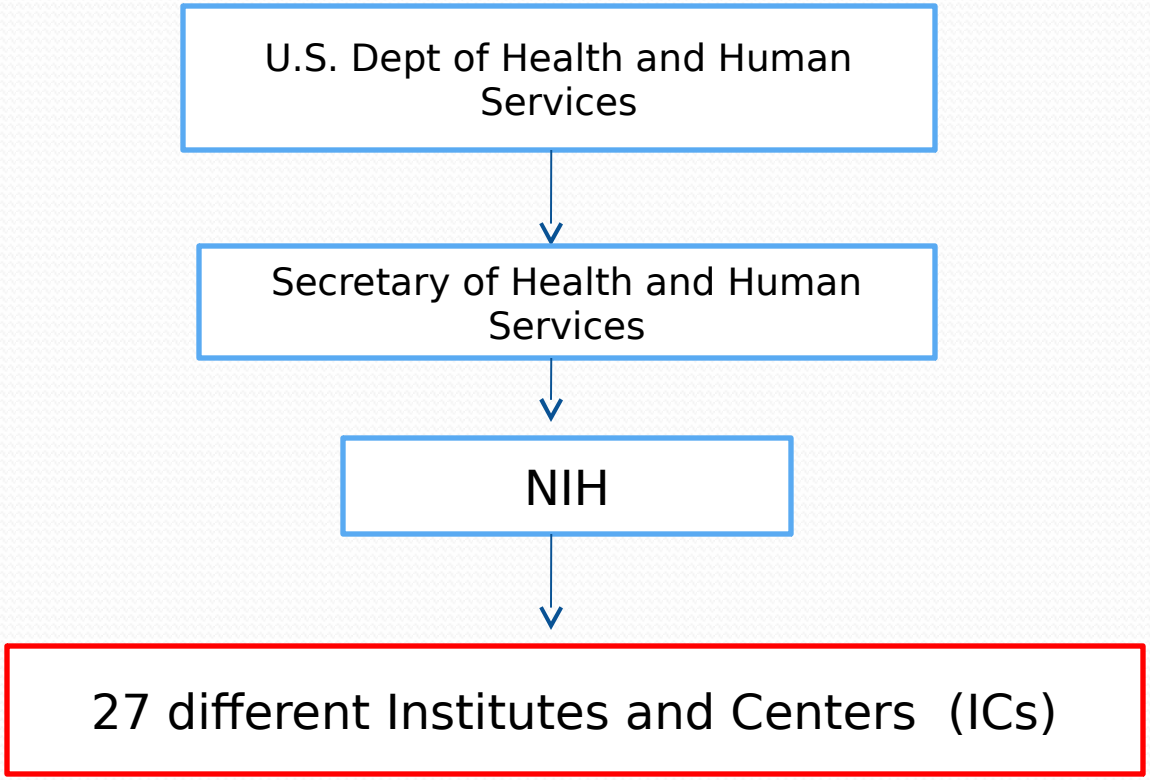
Grants.gov

- Complete listing of all federal grants
- To access:

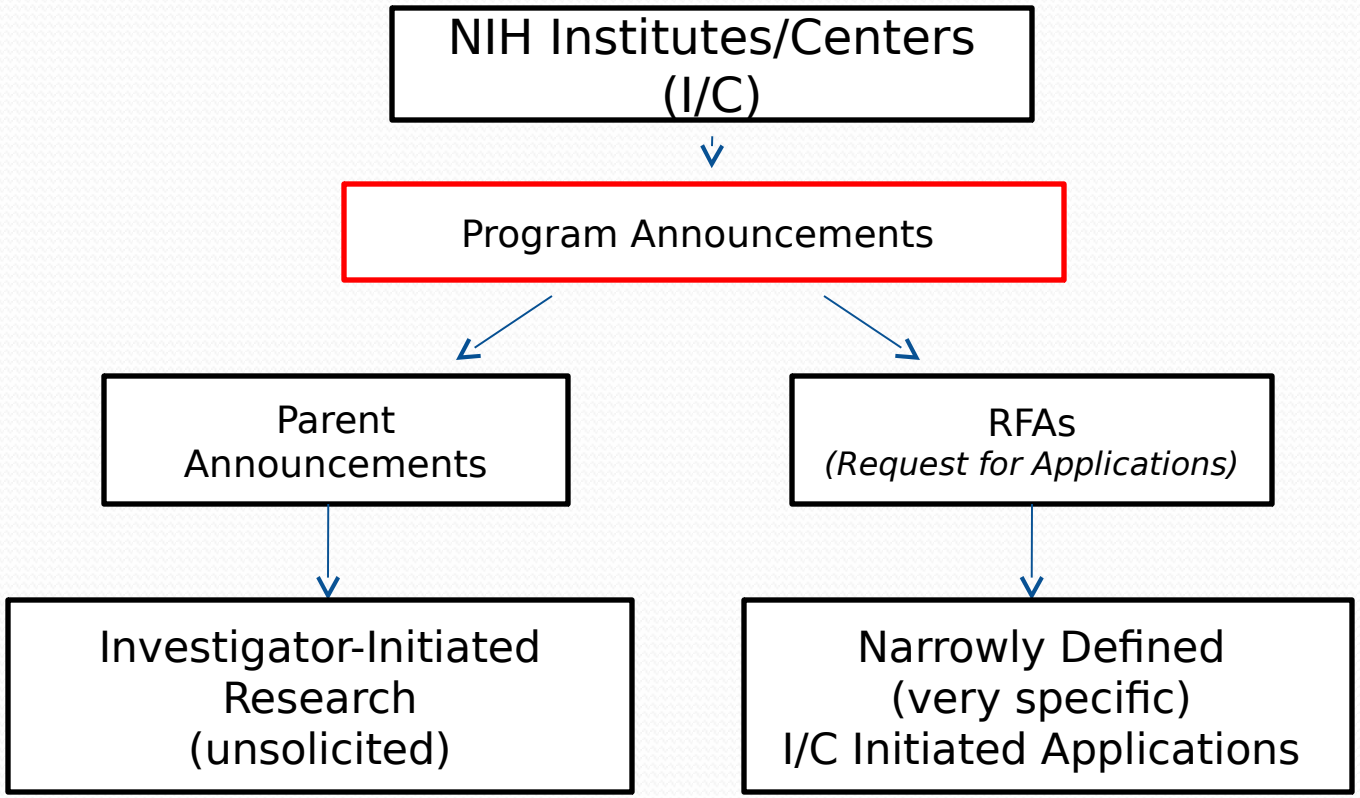
  Go to www.Grants.gov; then select “Find Grant Opportunities” on (L) side; then select Search by keyword, Funding Opportunity Number *(FON)* or Catalog of Federal Domestic Assistance (CFDA) number (= Basic Search). Insert 12.420 in box marked

  “Search by CFDA Number.” Click SEARCH

NIH


U.S. Dept of Health and Human Services
Secretary of Health and Human Services
NIH
27 different Institutes and Centers (ICs)

Funding Opportunities



Professional Organizations and Private Foundations

- Another option to explore
- May concurrently submit to both funding agencies
- Contact Program Manager
- Attention to application guidelines and deadlines
- Recent submissions to:
  - Farrah Fawcett Foundation
  - APFED HOPE (American Partnership for Eosinophic Disorders)

The art of "grantsmanship" will not turn mediocre science

into a fundable grant proposal. But poor "grantsmanship"

will, and often does, turn very good science into an

unfundable grant proposal.

Kraicer, J., The Art of Grantsmanship
www.hfsp.org/how/title.html (undated)